

REMARKS

By the above amendment, claim 67 has been amended to more particularly define the structural arrangement as illustrated in Fig. 1 of the drawings of this application. For example, claim 67, as amended, now recites the means for generating plasma as including a first power source represented by the power source 7 as illustrated in Fig. 1, which supplies a first electromagnetic wave of UHF to the planar plate, a second power source, as represented by the power source 9, for example, which supplies a second electromagnetic wave for controlling a radical in the plasma to the planar plate, means for adjusting an output of the second power source, as described at page 10, lines 10-16 of the specification, for example, a filter, as represented by the filter 8 as shown in Fig. 1, which supplies a superposed electromagnetic wave of the first and second electromagnetic waves, a first tuner, as represented by the tuner 22, which is arranged between the first power source 7 and the filter 8, a second tuner as represented by the tuner 21 which is arranged between the second power source 9 and the filter 8, and magnetic field generating means, as represented by the magnetic field generators 3A, 3B of Fig. 1, for example, it being noted that a third power source as represented by the power source 18, as illustrated in Fig. 1, serves for applying a bias to the sample stage. These features are clearly illustrated and described in the specification of this application, and applicants submit that claim 1, as amended, patentably distinguishes over the cited art, as will become clear from the following discussion.

Additionally, by the present amendment, the dependent claims have been amended in a manner which is considered to overcome the rejection of claims 69 and 71 under 35 U.S.C. 112, second paragraph, in that claims 69 and 71 now recite "a" ring-shaped member, such that the lack of antecedent basis for "the" ring-shaped member should now be overcome.

Further, by the present amendment, dependent claims 68, 71 and 72 have been amended to correspond to the language of claim 67, as amended. Thus, applicants submit that all dependent claims should now be considered to be in compliance with 35 U.S.C. 112, second paragraph.

As to the rejection of claims 67 and 70 under 35 U.S.C. §103(a) as being unpatentable over Yokogawa et al, JP 9-321031 (machine translation) in view of Gupta et al, U.S. Patent 5,902,494; the rejection of claim 71 under 35 U.S.C. §103(a) as being unpatentable over Yokogawa et al in view of Gupta et al and further in view of Kaji et al, EP 0793254 A2; the rejection of claim 69 under 35 U.S.C. §103(a) as being unpatentable over Yokogawa et al in view of Gupta et al and further in view of Collins et al, U.S. Patent 6,054,013 or Toshihisa et al, JP 07-310187 or Collins et al, U.S. Patent 6,074,512; and the rejection of claims 68 and 72 under 35 U.S.C. §103(a) as being unpatentable over Yokogawa et al in view of Gupta et al and Kaji et al and further in view of Sakamoto et al, U.S. Patent 5,698,062 or Danek et al, U.S. Patent 6,155,198; such rejections are traversed insofar as they are applicable to the present claims, and reconsideration and withdrawal of the rejections are respectfully requested.

As to the requirements to support a rejection under 35 U.S.C. 103, reference is made to the decision of In re Fine, 5 USPQ 2d 1596 (Fed. Cir. 1988), wherein the court pointed out that the PTO has the burden under §103 to establish a prima facie case of obviousness and can satisfy this burden only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in the art would lead that individual to combine the relevant teachings of the references. As noted by the court, whether a particular combination might be "obvious to try" is not a legitimate test of patentability and obviousness cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination. As further noted by the court, one cannot use

hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention.

Furthermore, such requirements have been clarified in the recent decision of In re Lee, 61 USPQ 2d 1430 (Fed. Cir. 2002) wherein the court in reversing an obviousness rejection indicated that deficiencies of the cited references cannot be remedied with conclusions about what is "basic knowledge" or "common knowledge".

The court pointed out:

The Examiner's conclusory statements that "the demonstration mode is just a programmable feature which can be used in many different device[s] for providing automatic introduction by adding the proper programming software" and that "another motivation would be that the automatic demonstration mode is user friendly and it functions as a tutorial" do not adequately address the issue of motivation to combine. This factual question of motivation is immaterial to patentability, and could not be resolved on subjected belief and unknown authority. It is improper, in determining whether a person of ordinary skill would have been led to this combination of references, simply to "[use] that which the inventor taught against its teacher."... Thus, the Board must not only assure that the requisite findings are made, based on evidence of record, but must also explain the reasoning by which the findings are deemed to support the agency's conclusion. (emphasis added)

Turning to Yokogawa et al, the Examiner contends that Yokogawa et al shows the invention substantially as claimed in the manner set forth at pages 3 and 4 of the Office Action. Irrespective of this contention by the Examiner, and assuming arguendo that Yokogawa et al discloses a first power source 116 for applying a bias to the power plate, as contended by the Examiner, and assuming arguendo that Yokogawa et al also discloses a power source 104 for supplying an electromagnetic wave of UHF to the plate via a filter 108 while the power source 116 supplies an electromagnetic wave to the plate by way of a filter 109, it is readily apparent that Yokogawa et al does not disclose or teach in the sense of 35 U.S.C. §103 the

claimed feature of a tuner, as represented by the tuner 22 in Fig. 1 of the drawings of this application, disposed between the power source 7 and the filter 8 nor a tuner, as represented by the tuner 21, disposed between the power source 9 and the filter 8 as recited in claim 67, as amended. Applicants submit that the recited feature of the tuners enable the adjustment of the output of the power source for superposing the outputs of the first power source and the second power source synchronously for supplying the outputs to the planar plate. According to the recited features, the effect that the radicals of the plasma can be controlled independently of the plasma generating condition is realized as described at page 3, lines 11-14 of the specification of this application. Furthermore, applicants note that the present invention provides the first and second power sources which operate differently from that of Yokogawa et al. Namely, the purpose of Yokogawa et al is to promote the reaction between the plasma and material gas as described in paragraph [0016] of Yokogawa et al. Thus, Yokogawa et al neither discloses nor suggests the synchronous superposition of the electromagnetic waves of the first and second electric power sources, which is effected by the features of the tuners and the means for adjusting an output of the second power source, as claimed in claim 67, and applicants submit that irrespective of the position set forth by the Examiner, Yokogawa et al provides no disclosure or teaching of these claimed features in the sense of 35 U.S.C. §103.

With respect to Gupta et al, while the Examiner recognizes that Yokogawa et al fails to expressly disclose wherein the planar plate includes a plurality of holes, and the source material gas is supplied through the plurality of holes, even assuming arguendo that Gupta et al can be combined with Yokogawa et al to provide the missing features, it is readily apparent that Gupta et al does not disclose first and second power sources operating in the manner defined together with tuners, a filter, and means for adjusting the output in the manner recited in claim 67 and therewith

the dependent claims, which features are also not disclosed by Yokogawa et al. Thus, applicants submit that claim 67 and the dependent claims patentably distinguish over the combination of Yokogawa et al and Gupta et al in the sense of 35 U.S.C. §103 and all claims should be considered allowable thereover.

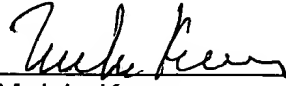
With respect to the other references utilized in further combination with Yokogawa et al and Gupta et al, applicants submit that irrespective of the Examiner's contentions concerning the structural features provided by such other references, such references do not overcome the deficiencies of Yokogawa et al and Gupta et al with respect to the claimed features of claim 67, and therefore, this combination, whatever it may be, also fails to provide the claimed features of claim 67 in the sense of 35 U.S.C. §103. Applicants submit that the Examiner has essentially engaged in a hindsight reconstruction attempt utilizing the principal of "obvious to try" which is not the standard of 35 U.S.C. §103. See In re Fine, supra. Furthermore, it is apparent that the combination fails to provide the claimed features of independent claim 67 and the dependent claims, such that applicants submit that all claims patentably distinguish over any of the combinations of references set forth by the Examiner, and all claims should be considered allowable thereover in the sense of 35 U.S.C. §103.

For the foregoing reasons, applicants submit that claim 67, as amended, together with the dependent claims recite features which are in compliance with 35 U.S.C. 112, second paragraph, and that all claims recite features which patentably distinguish over the cited art in the sense of 35 U.S.C. §103 and should be considered allowable thereover. Accordingly, issuance of an action of a favorable nature is courteously solicited.

To the extent necessary, applicant's petition for an extension of time under 37 CFR 1.136. Please charge any shortage in the fees due in connection with the filing

of this paper, including extension of time fees, to Deposit Account No. 01-2135
(500.37328CX1) and please credit any excess fees to such deposit account.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Melvin Kraus", written over a horizontal line.

Melvin Kraus

Registration No. 22,466

ANTONELLI, TERRY, STOUT & KRAUS, LLP

MK/cee
(703) 312-6600